NEW PROGRAM PROPOSAL: Ph.D. IN REHABILITATION SCIENCES UNIVERSITY OF KENTUCKY

ACTION
Agenda Item D-1-e
January 24, 2000

Recommendation:

That the multi-disciplinary and multi-institutional Doctor of Philosophy program in Rehabilitation Sciences proposed by the University of Kentucky, in conjunction with Eastern Kentucky University, Murray State University, and Western Kentucky University, be approved and registered in CIP 51.2399.01 (Rehabilitation Sciences).

Rationale:

- The coordination of programs in the professional fields of Physical Therapy, Occupational Therapy, and Communication Disorders responds to the growing nationwide need for adequately trained researchers and faculty in these areas, as well as to rising clinical demands caused by increased life expectancy, early detection of disabilities in children, and federal mandates regarding the provision of rehabilitation services.
- The leadership of the University of Kentucky, through its College of Allied Health Professions, is consistent with the university's mission to become a top-tier public research institution.
- The proposed doctoral program marshalls and coordinates the programmatic resources, institutional facilities, and faculty expertness at four universities throughout the Commonwealth and exemplifies the collaboration among postsecondary institutions that we want to foster.
- No doctoral program in any of the individual rehabilitation fields exists in Kentucky. The proposed program will offer both on-site training at various locations in the state and make coursework available to clinicians universally through distance learning.

An executive summary submitted by the University of Kentucky is attached to this agenda item.

Staff Preparation by Dianne M. Bazell

UNIVERSITY OF KENTUCKY MULTI-DISCIPLINARY Ph.D. PROGRAM IN REHABILITATION SCIENCES Executive Summary

Rehabilitation Science is the study of physical, musculoskeletal, neurological, psychological, and functional disorders in humans and the human response toward recovery and/or adaptation. Three rehabilitation professions -- Physical Therapy, Occupational Therapy and Communication Disorders -- are frequently referred to as the "Tri-Alliance of Rehabilitation Sciences" and are accustomed to working together in the evaluation and treatment of patients in the clinical setting. The goals of the rehabilitation science professions include the development, restoration, and maintenance of skill and function, the prevention of dysfunction and the systematic examination of adaptation to impairment, disability, and societal limitations.

Rehabilitation services are increasingly being utilized by citizens of all ages, across a wide range of settings including health care, schools, and the work place. Major demographic changes stemming from increases in life expectancy and improvements in living conditions have resulted in the emergence of the aged as a significant population requiring the services of the various rehabilitation professions. On the other end of the continuum, concern for the early detection and treatment of disabilities in children has increased the role of rehabilitation services with this population. In response to these increased demands for rehabilitation and habilitation services, program enrollments have been expanded in existing graduate-level educational programs preparing therapists, and many new educational programs have been started. This in turn has exacerbated an already short supply of doctorally prepared educators. The current output of doctorally prepared students is not sufficient to meet these needs, as many graduates choose to apply their skills in private practice and other positions requiring advanced clinical skills. Regardless of the ultimate roles assumed by doctoral graduates, the demand for additional graduates continues unabated.

The University of Kentucky's College of Allied Health Professions is in a unique position to play a leadership role in developing a multi-disciplinary and multi-institutional program in this area of vital national concern. The College of Allied Health Professions at the University of Kentucky has initiated a collaborative effort to address the rehabilitation needs of the Commonwealth through an exchange of educational and research expertise from eight educational programs at five Kentucky institutions of higher learning. These institutions are already engaged in graduate education and training across a full spectrum of health professions. The Ph.D. program in Rehabilitation Sciences will bring together scarce resources across the Commonwealth to create a program that will enable its graduates to provide academic and clinical leadership in addressing health-related issues that will become increasingly important as we move into the next century.

It is the intent of the proposed Ph.D. in Rehabilitation Sciences program to produce graduates who have a broad knowledge about delivery of rehabilitation services, as well as the fundamental biomedical and social advances within our society, and the ability to conduct basic or applied research which will add to the knowledge base in their discipline. Many of the key instructional components of the Ph.D. in Rehabilitation Sciences are currently in place. The program is consistent with the University's goal "to exert a leadership role in addressing the issues and challenges facing the Commonwealth, the nation, and the world." The Medical Center and Research and Graduate Studies sectors of the University of Kentucky have identified the development of a research-focused Ph.D. in Rehabilitation Sciences as a high priority for educational innovation. This purpose is shared by institutional partners at Eastern, Western, and Murray State Universities.

<u>Focus</u>: The program will be a research degree which will combine expertise, methodologies, and facilities from the four institutions, University of Kentucky, Eastern, Western, Murray State Universities. The program will incorporate the clinical, biomedical, social, and behavioral sciences. It will provide a comprehensive approach to the preparation of researchers and educators through a concentrated consideration of pediatrics, neurogenics and aging, or movement dysfunction. Each institution has agreed to share its particular expertise, including diagnostic and therapeutic protocols, clinical problem solving and team development, access and treatment approaches associated with rural health, long-term care, public health policy, and institutional responses under managed care.

The College of Allied Health Professions (CAHP) at the University of Kentucky has unique faculty resources and potential to offer this program. It, along with its institutional partners, has considerable experience with distance learning technology. The CAHP Physical Therapy Program was the first program in the country to be accredited with an outreach site supported largely through compressed video technology. Similar training and experience is evident among the occupational therapy faculty at EKU. Comparable efforts have been in the planning stage among the participating institutions to deliver a master's level program in Communication Disorders through the Commonwealth Virtual University which has been approved for implementation. In the 1998 Kentucky Legislative session, 20 million dollars were appropriated for the construction of a new CAHP building which will bring state of the art instructional, research, and clinical facilities under one roof.

<u>Curriculum</u>: The Doctoral Program in Rehabilitation Sciences is designed to produce academic leaders in the Rehabilitation Sciences for the professions of Communication Disorders, Occupational Therapy, and Physical Therapy. The major goal of the Program is to provide education to qualified students so that they will have a better understanding of the full spectrum of the rehabilitation process, as well as an in-depth knowledge of one specific area or discipline. Graduates of the program will be able to conduct

rehabilitation-related research, teach at the university level, direct discipline specific educational programs, work in the rehabilitation services field, and collaborate with other professionals on various issues pertaining to rehabilitation and health. Students will complete a concentrated interdisciplinary program that will prepare them as academicians, researchers, and clinical leaders in one of three tracks: Pediatrics, Aging and Adult Neurogenic Disorders, or Movement Dysfunction. The curriculum consists of a minimum of 48 hours of course work. It is composed of: (1) a required core in rehabilitation theory and practice; (2) training in clinical and experimental research methodologies related to rehabilitation; (3) advanced areas of specialization in a clinical rehabilitation domain consistent with the student's related discipline and clinical expertise, (4) a pre-dissertation research project, called a Research Apprenticeship; (5) experiential learning experiences focusing on instruction, called a Teaching Apprenticeship; and, (6) a dissertation. The pervasive interdisciplinary focus for the doctoral degree influences the core and the discipline specific courses.

The Rehabilitation Sciences Core (12 hours) will require a thorough knowledge of rehabilitation science from a multidisciplinary perspective that incorporates biological, psychological, and social perspectives. Particular emphasis in the core program will be placed on developing an understanding of the complex interrelations among the rehabilitation science disciplines. A multi-disciplinary problem-focused professional seminar will be required each semester as the student develops specific competencies in clinical rehabilitation theory and practice. In this seminar, emphasis will be placed on exploring current themes and major research issues in this domain and on developing proficiency in rehabilitation sciences research. This approach will build on a sequence of at least 10 credit hours focusing on research and scholarly methodologies which will be designed based on the student's professional discipline and the nature of anticipated research inherent in that discipline. In addition to methodological expertise gained in the disciplinary clusters and interdisciplinary seminars, students will participate in on-going research projects with appropriate faculty.

Each student will be expected to develop an in-depth understanding (24 credit hours) of a particular rehabilitation area to be selected from clusters of related topics in one of three professional disciplinary areas or tracks: Pediatrics, Aging and Adult Neurological Disorders, or Movement Dysfunction. Each student's area of specialization will be developed in collaboration with faculty members who have specialized expertise in the rehabilitation area. Course work in the area of specialization will include appropriate advanced professional disciplinary topics and elective courses in related areas. In each track, at least two courses must be taken wherein students from all three professional disciplines come together to explore diagnostic and treatment regimens, as well as identify common areas for future multi-disciplinary research.

In order to assure a thorough understanding of the instructional and research issues in clinical rehabilitation, each student's research and instructional competencies will be

assessed. Students who do not bring prior research experience into the program will be required to complete a research experience (apprenticeship) which will serve as preparation for completion of the dissertation. Other students may elect to participate in this research with a faculty member as way of exploring potential dissertation topics. Additionally, to prepare students for their future faculty roles, a supervised teaching experience will be provided. Students who may have had extensive teaching experience may fulfill this requirement by enrolling in seminars conducted by the Graduate School designed to prepare future academicians.

Organization: The program will be established and administered under the auspices of the Dean of the Graduate School. The program will be coordinated through the faculty in the Department of Clinical Sciences, College of Allied Health Professions, in the UK Medical Center. For administration of this multidisciplinary, multi-institutional program, the Dean of the Graduate School reports to the Chancellor of the Medical Center. Program leadership will be provided by a Ph.D. Program Faculty that will reflect the multidisciplinary aspects at the University of Kentucky and other collaborating institutions. The faculty will consist of a Faculty with Full Graduate Status (tenured Associate or Full Professors who have been granted Full Graduate Status) and an Associate Graduate Status Faculty (non-tenured Assistant Professors and all participating faculty from the other institutions). The Dean of the Graduate School will grant faculty status of all program faculty. The faculty will be coordinated by the Director of Graduate Studies who will be appointed by the Dean of the Graduate School, in consultation with the Chancellor of the Medical Center, on the recommendation of the Chair of Clinical Sciences through the Dean of the College of Allied Health Professions. The Director of Graduate Studies will serve as chair of a Program Coordination Committee composed of eight (8) Core Faculty members, providing representation from each participating institution and from all three disciplines.

Program Delivery: A distance learning network will be utilized when possible and appropriate for meetings, advising and instruction. It is anticipated that some courses will be offered in geographically strategic locations around the state at times that accommodate the enrollment of part-time students who have full-time clinical or educational positions. Selected courses will be delivered through Interactive Televison (ITV) during the evening hours and particularly on Saturdays when scheduling is most flexible. Faculty members at the University of Kentucky and at partnering institutions have developed considerable experience using this technology. A consideration in the development of the degree is the intent that multiple faculty members at several different sites will participate in the delivery of instruction, particularly the Rehabilitation Sciences courses. This approach is preferred by the faculty to minimize the adverse effects of passivity and isolation frequently experienced by ITV students, and to maximize the pervasive multidisciplinary focus of the program. There is no known program in the country which will employ such an extensive array of multi-institutional and multi-

disciplinary expertise in the delivery of a program of this nature using both conventional and distance learning strategies.

Faculty: The potential pool of Ph.D. Program Faculty currently consists of six (6) faculty members from the UK Medical Center with additional faculty and graduate assistant lines included in the budget proposal. Twelve (12) faculty have sought recognition as a member of the program faculty from other Kentucky institutions. This faculty will be comprised of representatives from Physical Therapy, Occupational Therapy, and Communication Disorders. These faculty members will be approved by the Dean of the Graduate School as the Program Faculty for the degree. The "founding" faculty who have contributed to the development of this proposal are drawn from the following professions and institutions.

Collaborating Institution	Number of Faculty	Professional Discipline
Eastern Kentucky University	1 4	Communication Disorders Occupational Therapy
Murray State University	4	Communication Disorders
University of Kentucky	3 3	Communication Disorders Physical Therapy
Western Kentucky University	3	Communication Disorders